

North American Plant Protection Organization

International *Cactoblastis cactorum* Conference

Phoenix, Arizona – USA

May 8-10, 2007

Ian McDonell

Executive Director

Mission

NAPPO coordinates the efforts among Canada, the United States and Mexico to protect their plant resources from the entry, establishment and spread of regulated plant pests, while facilitating intra/interregional trade.

Strategic Goals

- **Industry Group Involvement**

Industry's perspectives, interests, and priorities are incorporated into NAPPO's decision making

- **The Environment**

Environmental perspectives, interests, and priorities are incorporated into NAPPO's decision making.

Strategic Goals

- **World Trade**

NAPPO adoption of regional commodity and pest specific standards consistent with the provisions of the International Plant Protection Convention and the World Trade Organization Agreement on Sanitary and Phytosanitary Measures, leading to the ultimate goal of global adoption of these standards.

Strategic Goals

- **NAPPO Reputation**
- Rapid development of NAPPO Regional Standards,
- NAPPO positions on international standards and decisions of existing and emerging international organizations.

NAPPO PANELS

- ❖ **Accreditation**
- ❖ **Annual Meeting**
- ❖ **Biological Control**
- ❖ **Biotechnology**
- ❖ **Citrus**
- ❖ **Electronic Phytosanitary Certification**

NAPPO PANELS

- ❖ **Forestry**
- ❖ **Fruit**
- ❖ **Fruit Tree**
- ❖ **Grains**
- ❖ **Grapevine**
 - ❖ Grapevine TAG – Arthropods
 - ❖ Grapevine TAG - Nematodes

NAPPO PANELS

- ❖ **Invasive Species**
- ❖ **Pest Risk Analysis**
- ❖ **Phytosanitary Alert**
- ❖ **Plants for Planting**

NAPPO PANELS

- ❖ **Potato**
- ❖ **Standards**
- ❖ **Expert Working Group on Transgenic Arthropods**

NAPPO Regional Activities

- ❖ Regional Phytosanitary Standards
- ❖ NAFTA Technical Support
- ❖ Government/Industry Forum
- ❖ Pest Management
- ❖ Training and Development
- ❖ Pest Research

NAPPO Hemispheric Activities

- ❖ **Prevent Pest Movement**
- ❖ **Assist Developing Countries**

NAPPO Regional Phytosanitary Standards

RSPM No. 1 Pest Free Areas

RSPM No. 2 Guidelines for Preclearance
Programs

RSPM No. 3 Requirements for the Importation
of Potatoes

RSPM No. 4 Guidelines for the Use of
Irradiation as a Phytosanitary
Treatment (Superceded by ISPM No. 18)

RSPM No. 5 Glossary of Phytosanitary Terms

NAPPO Regional Phytosanitary Standards

- RSPM No. 6** Guidelines for the Development and Amendment of NAPPO RSPMs
- RSPM No. 7** Guidelines for Petition for Release of Exotic Phytophagous Agents for the **Biological Control** of Weeds
- RSPM No. 8** The Accreditation of Individuals to Sign Federal Phytosanitary Certificates
- RSPM No. 9** The Accreditation of Laboratories for Phytosanitary testing

NAPPO Regional Phytosanitary Standards

- | | |
|--------------------|---|
| RSPM No. 10 | Surveillance for Quarantine Fruit Flies (Superceded by RSPM No. 17) |
| RSPM No. 11 | Import Requirement for Wood Dunnage and other Wood Packaging Materials into a NAPPO Country
(Superceded by ISPM No. 15) |
| RSPM No. 12 | Guidelines for Petition for Release of Exotic Entomophagous Agents for the Biological Control of Pest |

NAPPO Regional Phytosanitary Standards

- | | |
|--------------------|---|
| RSPM No. 16 | Guidelines for the Importation of Citrus Propagative Material into a NAPPO Member Country |
| RSPM No. 17 | Guidelines for the Establishment, Maintenance and Verification of Fruit Fly Free Areas in North America |
| RSPM No. 18 | Guidelines for the Movement of Plum Pox Virus Susceptible Nursery Stock |

NAPPO Regional Phytosanitary Standards

RSPM No. 19 Guidelines for Bilateral Workplans

RSPM No. 20 Guidelines for the Establishment,
Maintenance an Area of Low Pest
Prevalence in North America

RSPM No. 21 Harmonized Procedure for
Morphologically Distinguishing
Teliospores of Karnal Bunt,
Ryegrass Bunt and Rice Bunt

NAPPO Regional Phytosanitary Standards

RSPM No. 22 Guidelines for Construction and Operation of a **Containment Facility for Insect and Mite Biological Control Agents**

RSPM No. 23 Guidelines for Consignments in Transit

RSPM No. 25 Guidelines for importation of pome and stone fruit trees

NAPPO Regional Phytosanitary Standards

RSPM No. 26 Guidelines for certification of commercial arthropod biological control agents moving into NAPPO member countries

RSPM No. 27

Importation and Confined Release of Transgenic Arthropods in NAPPO

NAPPO 31st
Annual Meeting
October 22-26, 2007

St-John's
Newfoundland and Labrador
Canada

NAPPO HEADQUARTERS



NAPPO

NAPPO Website



NAPPO

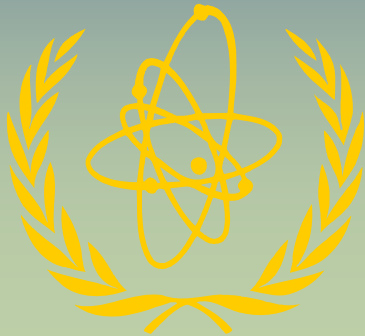
International Atomic Energy Agency (IAEA) Headquarters in Vienna, Austria



*Joint FAO/IAEA Division of Nuclear
Techniques in Food and Agriculture
Insect Pest Control Section*



*The mission of the International
Atomic Energy Agency (IAEA)*



**TO ACCELERATE AND ENLARGE
THE CONTRIBUTION OF ATOMIC
ENERGY TO PEACE, HEALTH AND
PROSPERITY THROUGHOUT THE
WORLD**

The Joint FAO/IAEA Programme

THE MISSION:

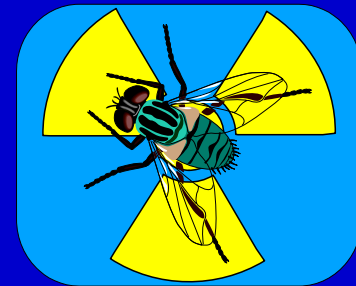
***DEVELOP AND IMPROVE NUCLEAR TECHNOLOGIES
FOR SUSTAINABLE FOOD SECURITY AND SAFETY***



*Joint FAO/IAEA Division of Nuclear
Techniques in Food and Agriculture
Insect Pest Control Section*



INSECT AND PEST CONTROL SUB-PROGRAMME



Mandate

to assist Member States with areawide suppression or eradication of major insect pests of crop and livestock by developing and integrating the Sterile Insect Technique with other pest control methods



JOINT FAO/IAEA PROGRAMME
of Nuclear Techniques in Food and Agriculture



***SIT* : most environment-friendly method**

- ⇒ extremely target specific: intra-specific
- ⇒ no introduction of exotic insects
- ⇒ no establishment in time and space
- ⇒ sustainable because of reduced insecticide use



STERILE INSECT TECHNIQUE

Focus only on Major Key Pests:

- major targets of continuous insecticide use
- constraint to international trade in agricultural commodities
- key constraint for food security
- trans-boundary pest problems
- exotic alien invasive pests



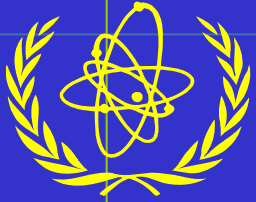


ALIEN INVASIVE SPECIES

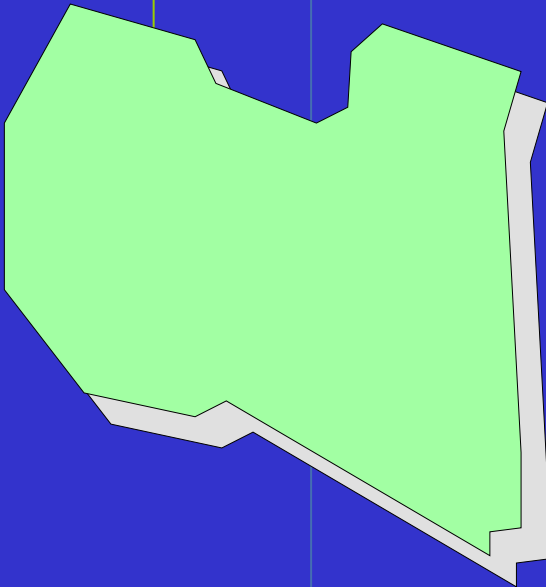
- When prevention has failed, eradication should be the first option to be considered to avoid alien pest establishment
- SIT, because its effectiveness is inverse density dependant, is among the few environment-friendly tools capable of eradication
- SIT has not been developed for major potential key pests
- Need for considerable R&D to prepare for the worst alien invasive pests



*Eradication of **NWS** from North Africa:*



Libya
1990-1992



JOINT *FAO/IAEA* PROGRAMME
of Nuclear Techniques in Food and Agriculture





SUPPORT OF IAEA TO THE CACTUS MOTH PROBLEM

Consultants Meeting in Vienna Austria July 2002

- Mexico's Plant Protection General Directorate (DGSV)
- Cuba's Plant Protection Research Institute
- FAO
- USDA/ARS
- Nature Conservancy

THE WAY FORWARD WAS OUTLINED



SUPPORT OF IAEA TO CACTUS MOTH PROBLEM

PRESENT:

Research and Development (R&D)

- Research contracts with institutions in: USA, South Africa, Argentina and Switzerland to develop artificial mass rearing, sterilization procedures, survey mechanisms, chemical control methods, basic biology and dispersal studies.

Technical Co-operation Projects (TCP)

- TCP with Mexico (2003 to 2007) on “Prevention Against Cactus Moth in Mexico”
 - + PR material to raise awareness (book and video)
 - + Training of plant protection staff through scientific visits to South Africa and a course in Florida
 - + Provision of materials for surveillance network
 - + Expert missions to the Caribbean and Central America to assess cactus moth status



SUPPORT OF IAEA TO THE CACTUS MOTH PROBLEM

FUTURE:

- Through research contracts, continue supporting the development of survey techniques and the SIT for effective suppression/eradication of cactus moth.
- Upon request from the Mexican Government continue supporting activities aimed at preventing the introduction and establishment of cactus moth through a National Technical Cooperation Project.
- Upon request from countries affected or at risk from cactus moth support a regional initiative against this pest.

PERSPECTIVES

STRATEGIC OPTIONS

- + Off-shore pest mitigation (prevention)
- + Erad. of recently introduced isolated populations "Outbreaks"
- + Erad. of established but confined populations
- + Erad. of established wide-spread populations
- + Living with the pest and with its huge econ., social and environ. cost

COST \$

Lowest

Highest

COUNTRIES OPTIONS GIVEN PEST STATUS

- + Mexico
- + USA (FL, GA, SC)
- + Cuba, Dominican Republic



ELIMINATING CACTUS MOTH FROM THE REGION

2002-2004

STEP 1

- 1.1 Capacity building
- 1.2 Delimitation

2005-2006

STEP 2

Technology validation
in Florida, Alabama
USA

2007

STEP 3

Preparations for an
eradication
programme

2008-2009

STEP 3a

Eradication USA &
Isla Mujeres, Mexico

2010-20012

STEP 3b

Eradication from high
risk Caribbean Islands

20013+

STEP 4

Ongoing regional
surveillance and
quarantine

THANK YOU

GRACIAS